

CLAIM AMENDMENT

1. (currently amended) A method for operating a proxy disposed between a user and a document accessible to said user over a computer network, comprising:

- (a) obtaining an electronic document:
 - (i) identifiable by a network address of said document;
 - (ii) including one or more references to one or more embedded objects;
 - (iii) each said one or more ~~imbedded~~-embedded objects being identifiable by a preexisting network address therefor;
- (b) for at least one of said one or more embedded objects, facilitating storage and re-use thereof from a cache accessible to said user, without requiring user validation of said one or more embedded objects upon said re-use, by:
 - (i) specifying a new network address uniquely identifying said one or more embedded objects; and
 - (ii) specifying cacheability information for said one or more embedded objects; and
- (c) modifying said document by replacing said preexisting address for said one or more embedded objects with said new network address.

2. (original) The method of claim 1 occurring automatically in response to said user request for said document.

3. (original) The method of claim 1 where said proxy is implemented as an intermediary server located between a computer of said user and a server of said document.

4. (original) The method of claim 1 where said new network address has at least a portion in common with said preexisting network address.

5. (original) The method of claim 1 where said cacheability information includes a long expiry date.

6. (original) The method of claim 1 where said cacheability information includes a long maxage parameter.
7. (original) The method of claim 1 where said cacheability information includes a relatively recent last modified date.
8. (original) The method of claim 1 where said cacheability information includes how long said object can be cached without revalidation.
9. (original) The method of claim 1 where said proxy is co-located at a server of said document.
10. (previously amended) The method of claim 9 where said document is dynamically generated at said server.
11. (original) The method of claim 10 where said dynamic generation includes executing a programmatic description of said document in conjunction with data for at least one variable in said programmatic description.
12. (previously amended) The method of claim 1 further comprising storing said one or more embedded objects at said proxy for later use.
13. (previously amended) The method of claim 12 further comprising validating said one or more embedded objects that are stored against a server thereof.
14. (previously amended) The method of claim 13 further comprising refreshing said one or more embedded objects using condensation techniques.
15. (previously amended) The method of claim 34, where said steps (i) through (iii) recited in claim 34 include:
 - (i) determining said preexisting network address for said object;
 - (ii) fetching said object from said preexisting network address;
 - (iii) replacing said cacheability information in said object; and
 - (iv) forwarding said object in response to said request.

16. (currently amended) The method of claim 33, where said user request in said step recited in claim 33 comes from said user ~~of~~ recited in said last step of claim 1.

17. (previously amended) The method of claim 33, where said user request in said step recited in claim 33 comes from a user different than said user recited in said last step of claim 1.

18. (previously amended) A computer-readable medium comprising program logic instructions for operating a proxy disposed between a user and a document accessible to said user over a computer network, in order to facilitate re-use of objects within said document from a cache without requiring user validation of said objects upon re-use, said instructions when executed:

- (a) obtaining an electronic document:
 - (i) identifiable by a network address of said document;
 - (ii) including one or more references to one or more embedded objects;
 - (iii) each said one or more embedded objects being identifiable by a preexisting network address therefor;
- (b) for at least one of said one or more embedded objects, facilitating storage and re-use thereof from a cache accessible to said user, without requiring user validation of said one or more embedded objects upon said re-use, by:
 - (i) specifying a new network address uniquely identifying said one or more embedded objects; and
 - (ii) specifying cacheability information for said one or more embedded objects; and
- (c) modifying said document by replacing said preexisting address for said one or more embedded objects with said new network address.

19. (original) The method of claim 18 occurring automatically in response to said user's request for said document.

20. (original) The method of claim 18 where said proxy is implemented as an intermediary server located between a computer of said user and a server of said document.
21. (original) The method of claim 18 where said new network address has at least a portion in common with said preexisting network address.
22. (previously amended) A device configured to facilitate re-use of objects within said document from a cache comprising:
 - (a) resources for obtaining an electronic document:
 - (i) identifiable by a network address of said document;
 - (ii) including one or more references to one or more embedded objects;
 - (iii) each said one or more embedded objects being identifiable by a preexisting network address therefor;
 - (b) resources for facilitating storage and re-use of at least one of said one or more embedded objects, from a cache accessible to said user, without requiring validation of said one or more embedded objects upon said re-use, by:
 - (i) specifying a new network address uniquely identifying said one or more embedded objects; and
 - (ii) specifying cacheability information for said one or more embedded objects; and
 - (c) resources for modifying said document by replacing said preexisting address for said one or more objects with said new network address.
23. (original) The device of claim 22 occurring automatically in response to said user's request for said document.
24. (previously amended) The device of claim 22 where a proxy is implemented as an intermediary server located between a computer of said user and a server of said document.

25. (original) The device of claim 22 where said new network address has at least a portion in common with said preexisting network address.
26. (previously amended) The method of claim 34, wherein step (ii) recited in claim 34 includes validating said object against a content server.
27. (previously amended) The method of claim 34, wherein step (iii) recited in claim 34 includes instructing said user to user a copy of said object accessible to said user.
28. (previously added) The method of claim 1, further comprising transmitting to said user a version of said object.
29. (previously amended) A method for operating a proxy disposed between a user and a document accessible to said user over a computer network, in order to facilitate re-use of objects within said document from a cache instead of necessarily requiring downloading said objects upon each use, comprising:
 - (a) obtaining an electronic document;
 - (i) identifiable by a network address of said document;
 - (ii) including one or more references to one or more embedded objects;
 - (iii) each said one or more embedded objects being identifiable by a network address therefore;
 - (b) for at least one of said one or more embedded objects, facilitating storage and re-use thereof from a cache accessible to said user, without requesting said one or more embedded objects upon said use, by specifying cacheability information for said one or more embedded objects that:
 - (i) permits caching thereof;
 - (ii) including an entity tag uniquely identifying said one or more embedded objects; and
 - (iii) specifies a required validation of said one or more embedded objects.

30. (previously amended) The method of claim 45 wherein:
 - (a) said validity evaluation does not indicate invalidity; and
 - (b) further comprising instructing said user to use a copy of said object accessible to said user.
31. (previously amended) The method of claim 45, where:
 - (a) said validity evaluation indicates invalidity; and
 - (b) further comprising transmitting to said user a version of said object.
32. (previously added) The method of claim 1, further comprising:
transmitting said modified document to said user.
33. (previously added) The method of claim 32, further comprising:
receiving a user request for at least one of said embedded objects.
34. (currently amended) The method of claim 33, further comprising:
in response to said request;
 - (i) transmitting said cacheability information to said requesting user;
 - (ii) evaluating the validity of said requested object, using information from said user request; and
 - (iii) transmitting an outcome of said validity evaluation to said requesting user.
35. (previously added) The medium of claim 18, further comprising:
transmitting said modified document to said user.
36. (previously added) The medium of claim 35, further comprising:
receiving a user request for at least one of said embedded objects.
37. (currently amended) The medium of claim 36, further comprising:
in response to said request;
 - (i) transmitting said cacheability information to said requesting user;
 - (ii) evaluating the validity of said requested object, using information from said user request; and

- (iii) transmitting an outcome of said validity evaluation to said requesting user.
38. (previously added) The device of claim 22, further comprising:
resources for transmitting said modified document to said user.
39. (previously added) The device of claim 38, further comprising:
resources for receiving a user request for at least one of said embedded objects.
40. (previously added) The device of claim 39, further comprising:
resources for transmitting said cacheability information to said requesting user.
41. (previously added) The device of claim 40, further comprising:
resources for evaluating the validity of said requested object, using information from said user request.
42. (previously added) The device of claim 41, further comprising:
resources for transmitting an outcome of said validity evaluation to said requesting user.
43. (previously added) The method of claim 29, further comprising:
transmitting said modified document to said user.
44. (previously added) The method of claim 43, further comprising:
receiving a user request for at least one of said embedded objects.
45. (currently amended) The method of claim 44, further comprising:
in response to said request;
 - (i) transmitting said cacheability information to said requesting user;
 - (ii) evaluating the validity of said requested object, using information from said user request; and

- (iii) transmitting an outcome of said validity evaluation to said requesting user.